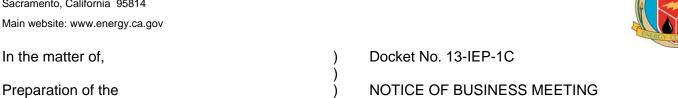
#### CALIFORNIA ENERGY COMMISSION

2013 Integrated Energy Policy Report

1516 Ninth Street Sacramento, California 95814

(2013 IEPR)

Main website: www.energy.ca.gov



RE: Adoption of CED 2014-2024 Final

**Notice to Consider Adoption** California Energy Demand 2014 – 2024 Final Forecast Publication Nos. CEC 200-2013-004-SF-V1 and CEC 200-2013-004-SF-V2 **Docket No.13-IEP-1C** 

Forecast

The California Energy Commission will hold a Business Meeting on:

# **WEDNESDAY, DECEMBER 11, 2013**

Beginning at 10 a.m. CALIFORNIA ENERGY COMMISSION 1516 Ninth Street First Floor, Hearing Room A Sacramento, California (Wheelchair Accessible)

Note: Audio from this meeting will be broadcast over the Internet. For details on listening in, please go to www.energy.ca.gov/webcast/

This staff final report will be presented for possible adoption by the California Energy Commission during the Business Meeting held Wednesday, December 11, 2013. The staff final report, California Energy Demand 2014 - 2024 Final Forecast (CED) is prepared in support of the 2013 Integrated Energy Policy Report. The staff report presents forecasts of electricity and end-user natural gas consumption and peak electricity demand for California and for utility planning areas within the state and scenarios for additional achievable energy efficiency.

The adopted forecast will be used in a number of upcoming planning proceedings, including the California Independent System Operator's (California ISO) transmission planning and the California Public Utilities Commission's (CPUC) long-term procurement planning.

# **Background**

The Energy Commission, the CPUC and the California ISO are actively engaged in collaborative discussion on how to consistently account for reduced energy demand from energy efficiency in these planning and procurement processes to offset the need for additional generation and transmission infrastructure. To that end, the Energy Commission leadership in consultation with the CPUC and the California ISO will jointly decide on a particular forecast set to be used as the starting point in the upcoming planning processes. The final decision will be documented in the 2013 IEPR, scheduled to be adopted at the January 15, 2014 Business Meeting.

As part of the IEPR proceeding, the Energy Commission requests stakeholder input into the choice of a base case and additional achievable energy efficiency (AAEE) for use in long-term planning. These comments may be submitted in writing by December 10, 2013 or in person at the December 11, 2013 Business Meeting. Instructions follow below.

The choice made by the Energy Commission leadership in consultation with the CPUC and the California ISO will be comprised of two components that are drawn from the adopted IEPR demand forecast: (1) a base case from the *CED* with its weather variants (likelihood of normal to more extreme temperatures), and (2) one or more scenarios of additional achievable energy efficiency (AAEE). This combination or forecast set also is referred to as a "managed" demand forecast.

Forecasting is inherently uncertain over the 10-year period, given pace and scale of economic recovery, consumer uptake on new local area efficiency programs, transportation electrification, and changing weather patterns. The effort to forecast for increasingly smaller geographic areas adds to the complexity of selecting a suitable planning forecast.

Different weather variants are necessary for different system planning applications, which range from the bulk electric system to highly disaggregated local reliability areas. Normal peak weather conditions (1 year in 2) are used for system flexibility studies performed by the California ISO as input into procurement and for economic studies in transmission planning. As planning shifts to increasingly smaller local capacity areas and local reliability studies, more adverse peak weather conditions (1 year in 10) allow for the greater uncertainty

Similar uncertainties impact the choices for AAEE. Transmission and procurement planning place reliability at the forefront. The specific locations of the efficiency savings are more important for local reliability areas. More conservative, less aspirational estimates are traditionally used for this type of planning, in contrast to what is appropriate system-wide. Busbar-level locations and load-shape impacts of AAEE programs are crucial for studying local needs, but there is uncertainty about where and

when these additional savings will develop. The three agencies are collaborating to improve the busbar-level disaggregation and load-shape impact methods.

These two forecast components have been separate in the past and may continue to need to be separate in the future, since they may be subject to different modeling processes. For example, AAEE savings may be modeled with one method of geographic disaggregation, knowing that savings in the future may not be distributed across the electrical system in the same way that existing loads are distributed now. In addition, to the extent that local capacity requirements eventually translate into geographically targeted AAEE savings from one or more programs, these program impacts ought to be allocated differently than traditional programs for which all endusers may be eligible.

A single forecast "set" can be considered to be these two components – a baseline demand forecast case and an AAEE savings scenario – expressed through multiple peak weather variants and allocations to busbars for transmission planning and local capacity studies.

## Stakeholder Input Requested

Please provide written or oral comments on the following:

- Recommendation of a preferred base case and AAEE scenario to comprise the single forecast set or managed forecast with a rationale for the choices.
- Should different combinations of forecast components be used for different long term planning purposes local versus system-wide planning? If you agree, please explain your rationale for using each single forecast set and the appropriate planning process. If you disagree, please explain why.

Interested parties are invited to provide comments on the report by 5 p.m. on **December 10, 2013.** Please include the docket reference 13-IEP-1C – "Demand Forecast" in the subject line or first paragraph of your comments. Comments may be submitted electronically. Please send your comments in either Microsoft Word format or as a Portable Document File (PDF) by electronic mail to docket@energy.ca.gov and copy the staff lead at <a href="mailto:Sylvia.Bender@energy.ca.gov">Sylvia.Bender@energy.ca.gov</a> or send them on a Compact Disc to:

California Energy Commission Dockets Office, MS-4 RE-Docket No. 13-IEP-1C 1516 Ninth Street Sacramento, CA 95814-5512

In addition to written comments due on December 10, 2013, stakeholders will have the opportunity to provide oral comments to articulate preferences for consideration of the AAEE forecast at the December 11, 2013, Business Meeting. Both written and oral input will be considered by the Energy Commission leadership in consultation with the

CPUC and the California ISO in their decision. This staff final report and accompanying forms with detailed forecast information in MS-Excel format will be available free by December 3, 2013, from the Energy Commission's website at:

http://www.energy.ca.gov/2013\_energypolicy/documents/index.html#12112013

#### **Public Adviser and Other Commission Contacts**

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission proceedings. If you want information on how to participate in this forum, please contact the Public Adviser's Office at PublicAdviser@energy.ca.gov or (916) 654-4489 (toll free at (800) 822-6228.

If you have a disability and require assistance to participate, please contact Lou Quiroz at Lou.Quiroz@energy.ca.gov or (916) 654-5146 at least five days in advance.

News media should direct inquiries to the Media and Public Communications Office at (916) 654-4989, or by e-mail at mediaoffice@energy.ca.gov. For general questions regarding the IEPR proceeding, please contact Lynette Green, IEPR project manager, at (916) 653-2728 or by e-mail at <a href="mailto:Lynette.Green@energy.ca.gov">Lynette.Green@energy.ca.gov</a>.

Date: November 27, 2013

ROBERT B. WEISENMILLER, Ph.D. Chair
Electricity Lead Commissioner

Mail lists: energypolicy, electricity, naturalgas